



--52. A DNA construct as defined in claim 51, wherein said sequence is derived from *Humicola insolens*.--

--53. A DNA construct encoding an endoglucanase enzyme, wherein said construct has a sequence selected from the group consisting of:

- (a) the sequence of SEQ ID NO:3; and
- (b) a sequence which hybridizes to the sequence of SEQ ID NO:3 at 40°C in 20% formamide-50 mM sodium phosphate pH 6.8.—

--54. A DNA construct as defined in claim 53, wherein said sequence is derived from *Fusarium*.--

--55. A DNA construct as defined in claim 54, wherein said sequence is derived from *Fusarium oxysporum*.—

--56. A DNA construct encoding an endoglucanase enzyme, wherein said construct comprises a sequence from which a polymerase chain reaction (PCR) fragment may be amplified using a set of sense and antisense oligonucleotide primers selected from the group consisting of:

- (a) sense primer SEQ ID NO:17 and antisense primer SEQ ID NO:21;
- (b) sense primer SEQ ID NO:18 and antisense primer SEQ ID NO:22;
- (c) sense primer SEQ ID NO:17 and antisense primer SEQ ID NO:23;
- (d) sense primer SEQ ID NO:18 and antisense primer SEQ ID NO:24;
- (e) sense primer SEQ ID NO:19 and antisense primer SEQ ID NO:23; and
- (f) sense primer SEQ ID NO:20 and antisense primer SEQ ID NO:24.—

--57. A DNA construct as defined in claim 56, wherein the PCR fragment amplified using set (e) or (f) has a size of at least 159 base pairs. --

--58. A DNA construct as defined in claim 56, wherein the PCR fragment amplified using set (c) or (d) has a size of at least 510 base pairs.—

~~1~~ 60. A DNA construct as defined in claim ~~56~~<sup>7</sup>, wherein the PCR fragment amplified using set (a) or (b) has a size of at least 288 base pairs--

~~1~~ 61. A DNA construct as defined in claim ~~56~~<sup>7</sup>, wherein said sequence is derived from a genus selected from the group consisting of *Humicola*, *Trichoderma*, *Myceliophthora*, *Phanerochaete*, *Schizophyllum*, *Penicillium*, *Aspergillus*, and *Geotricum*--

~~1~~ 62. A vector comprising a DNA construct as defined in claim ~~56~~<sup>7</sup>--

~~1~~ 63. A host cell transformed with a vector as defined in claim ~~62~~<sup>12</sup>--

~~1~~ 64. A method for producing an endoglucanase enzyme, said method comprising: (a) culturing a cell as defined in claim ~~65~~<sup>13</sup>, under conditions suitable for expression of said construct, and (b) recovering the enzyme from the culture.--

~~1~~ 65. A vector comprising a DNA construct as defined in claim ~~56~~<sup>7</sup>--

~~1~~ 66. A host cell transformed with a vector as defined in claim ~~65~~<sup>15</sup>--

~~1~~ 67. A method for producing an endoglucanase enzyme, said method comprising: (a) culturing a cell as defined in claim ~~66~~<sup>16</sup>, under conditions suitable for expression of said construct, and (b) recovering the enzyme from the culture.--

~~1~~ 68. A vector comprising a DNA construct as defined in claim ~~56~~<sup>7</sup>--

~~1~~ 69. A host cell transformed with a vector as defined in claim ~~68~~<sup>18</sup>--

~~1~~ 70. A method for producing an endoglucanase enzyme, said method comprising: (a) culturing a cell as defined in claim ~~69~~<sup>19</sup>, under conditions suitable for expression of said construct, and (b) recovering the enzyme from the culture.--